

# Cypress™

## Cypress Tech Talk

May 18, 2021



**MITRE**

The Office of the National Coordinator for  
Health Information Technology



**CMS**  
CENTERS FOR MEDICARE & MEDICAID SERVICES

# Agenda

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- Software Updates
  - Cypress 6.x Annual Update
    - Community Suggested Features and Bug Fixes
- Recent Issue
  - Cypress Known Issues Dashboard
- Cypress Versions
- Open Discussion
- Contact Information

\*See the Glossary at the back for definitions of terms

## *Software Updates*

# Cypress 6.x (Annual Update)

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- **Cypress 6.x**
  - For the 2022 Reporting and Performance Period
  - Release will be 2021 and 2022 compatible
  - 2021 bundle (for the 2022 reporting period) can be loaded alongside the the 2020 bundle (for the 2021 reporting period)
  
- **Release Schedule**
  - Preview will be available as a VM (Virtual Machine) May 20, 2021
  - Final Release will be available in all release formats Summer 2021

# Community Suggested Features and Bug Fixes

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- UI Updates
  - Ability to view calculation results for subpopulations when filtering Vendor and Master Patient Lists ([CYPRESS-2218](#))
  - Ability to view Measure Observation calculations in patient lists, and individual patient calculations ([CYPRESS-2236](#))
  - Removed caching of Vendor Patients which hid updates to uploaded patients ([CYPRESS-2212](#))
  - Validation progress displayed for long running tests
- Validation Updates
  - CVU+ Reporting Period validation updated for CMS529 to reflect CMS Guidance ([CYPRESS-2230](#))
- API Updates
  - Hosting of API Documentation on Cypress Web Server
  - API method to view Cypress Version ([CYPRESS-2068](#))
  - API methods to run CMS/HL7 Schematron validation ([CYPRESS-2041](#), [CYPRESS-2133](#))
- VM Updates
  - VM repackaged without compressed disks to support VMWare users on Windows OS ([CYPRESS-2207](#))

## Software Updates

# View Measure Observations

- Ability to view Measure Observation calculations in patient lists, and individual patient calculations ([CYPRESS-2236](#))
  - Observed values can be seen in the patient details view. Multiple values from different measurements may be observed in a single episode. The view may also show values from different episodes for the same patient.

	IPOP	DENOM	NUMER	DENEX	DENEXCEP
<b>CMS871v1 - PopulationSet 1</b>	2	2	1		
Episode 1 Observations:		9	1		
Episode 2 Observations:		2			

[View Logic Highlighting](#)

- Similar observed values can also be seen in the patient list summary view.

CMS871v0 - PopulationSet 1 Patients							
Patient Name	Template Name	DOB	Gender	IPOP	DENOM	NUMER	OBSERV
Chester Simpson	Z3 N Eye	February 12, 1971	Male				
Debra Collins	1 N performed GP Adult	March 17, 1978	Female				
Jessica Taylor	4 Diabetes Adult	March 9, 1967	Female	2	2	1	
Joann Lowe	7 Diabetes Adult	March 9, 1967	Female	1	1		9

2		
9   1		episodes

↓

observed values

# Software Updates

## Validation API

- **API methods to run CMS/HL7 Schematron validation ([CYPRESS-2041](#), [CYPRESS-2133](#))**
  - Adds validation endpoint that can be used to post QRDA artifacts for only program-based schematron validation as was available in the previous CVU tool
  - Provides validation information as a QRDA validation json response

/qrda_validation	
QRDA Validations on the system	
/qrda_validation	GET 
/qrda_validation/{year}/{qrda_type}/{implementation_guide}	POST 

### URI Parameters

- **Performance Period:** *required (string)*
- **QRDA Types (I or III):** *required (string)*
- **Implementation Guide (CMS or HL7):** *required (string)*

### Form Parameters

- **file:** *required (file)*  
Artifact to be tested

## Recent Issue

# Cypress Known Issues Dashboard

- <https://oncprojecttracking.healthit.gov/support/secure/Dashboard.jspa?selectPageId=18000>
- The dashboard collects all labeled known issues in one place, sorted by Cypress version
- Easily navigate to the dashboard from the Cypress summary page

Cypress Known Issues ...

Filter Results: Cypress Known Bugs 6.0.0 <span>...</span>			
Summary	2021 Performance Period EP/EC eQMs	2021 Reporting Period EH/CAH eQMs	Solution
CMS72v9-QRDA1 issue			
CMS134v9 Denominator Exclusion count	CMS134v9/NQFna		
CMS68v10 procedure performed incomplete issue			
CMS-190v9 C1 Sample testing returning Internal Error with code nullFlavor in Facility Location			
CMS-108/190 returning warning when submitting Z29 VTE for C1/C3 testing			

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# Cypress Versions

Version	Dates	Measures Supported
V5.4.2*	September 17, 2020	Latest version supporting eCQMs for the 2020 Reporting/Performance Period and CQL. Contains updates to support telehealth checking.
V6.1.2	February 11, 2021	Updates to support new schematron and MIPS APM Entity for the 2021 reporting/performance period eCQMs.
<i>V6.x Preview</i>	<i>May 20, 2021</i>	Support for the 2022 reporting/performance period eCQMs.

Bundle Version	Dates	Features
2019.2.0*	September 17, 2020	<b>Cypress v5 only</b> CQL-based measures released in 2019 for the 2020 reporting year. Contains updates for ELM issues found in CMS128v8, CMS146v8, and CMS56v8.
2020.0.5	February 19, 2021	<b>Cypress v6 only</b> Calculations for Master Patient List updated to reflect updated guidance for Relevant date/Relevant Period and addresses issues with time zone offsets.
<i>2021.0.1</i>	<i>May 20, 2021</i>	<b>Cypress v6 only</b> Measures and patients released in 2021 for the 2022 reporting year.

\* Cypress v5 and the 2019 bundle are outdated as the 2020 reporting has ended.

The Cypress v5 server will be decommissioned on May 31, 2021.

# OPEN DISCUSSION

# Next Cypress Tech Talk

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- Tuesday, June 1, 2021 at 1pm ET
- To join online, visit: <https://global.gotomeeting.com/join/529898157>
- To join via phone, dial: 1-646-749-3122
- Meeting Number: 529 898 157
- Meeting link, as well as a calendar event file, available at:
  - <https://www.healthit.gov/cypress/techtalks.html>

# Notes

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- **Completed Webinars will be posted on the Cypress website on the Tech Talks tab**
  - <https://www.healthit.gov/cypress/techtalks.html>
- **Send questions and feedback to the Cypress Talk List at**
  - [project-cypress-talk@googlegroups.com](mailto:project-cypress-talk@googlegroups.com)
- **Report bugs and issues to the Cypress JIRA at**
  - <https://oncprojecttracking.healthit.gov/support/browse/CYPRESS>

# Glossary

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- **API – Application Programming Interface**
- **CQL – Clinical Quality Language**
- **CVU – Cypress Validation Utility**
- **CVU+ – Cypress Validation Utility Plus Calculation Check**
- **EC – Eligible Clinician**
- **eCQM – Electronic Clinical Quality Measure**
- **EH – Eligible Hospital**
- **EP – Eligible Professional**
- **HL7 – Health Level Seven International**
- **IG – Implementation Guide**
- **QPP – Quality Payment Program**
- **QRDA – Quality Reporting Document Architecture**
- **UMLS – Unified Medical Language System**